



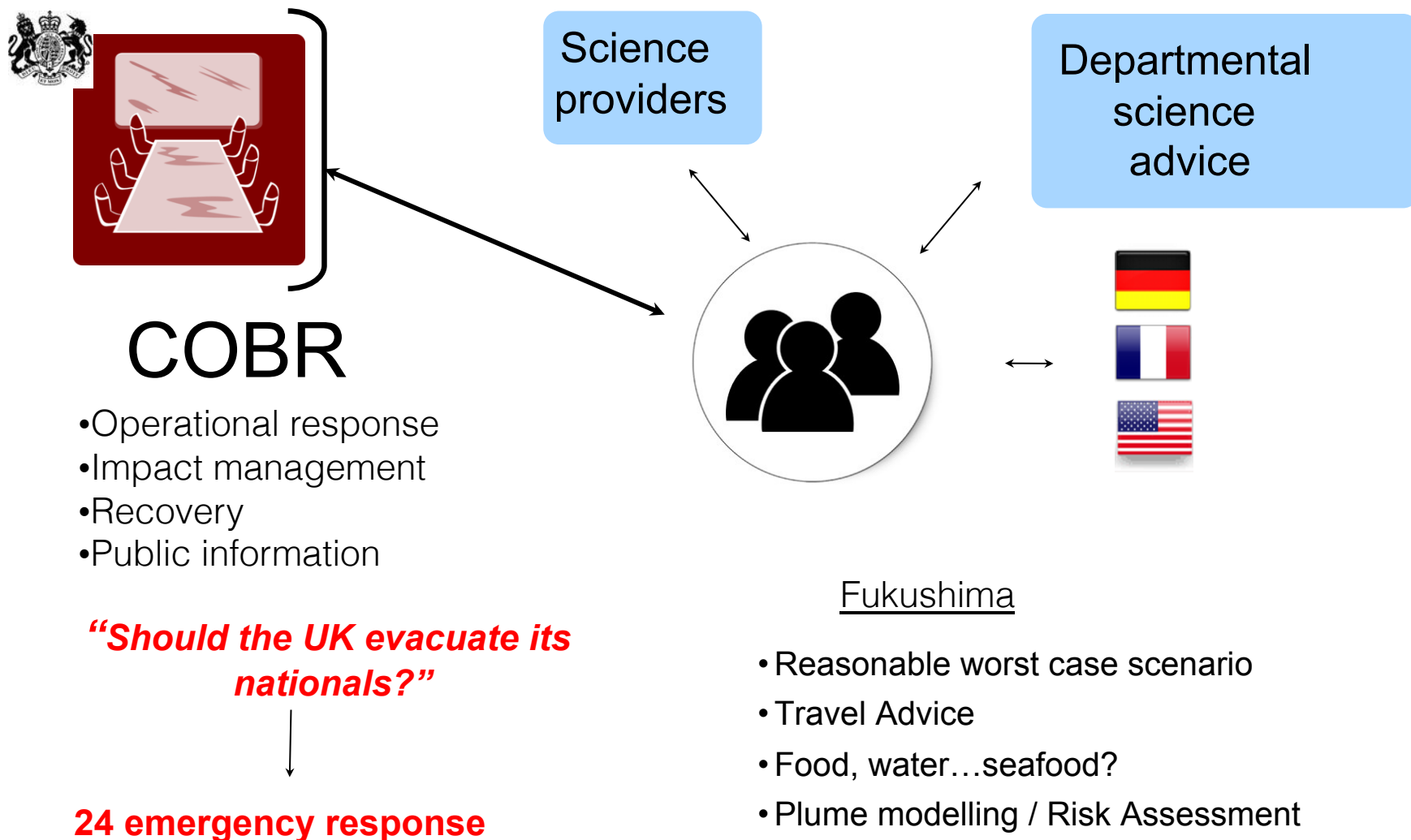
The Government Chief Scientific Adviser's Guidelines on the Use of Scientific and Engineering Advice in Policy Making



Lead government department

- Chief Scientific Advisor
- Science Advisory Committees
- Science Advisory Groups
 - Space Environmental Impacts Experts Group

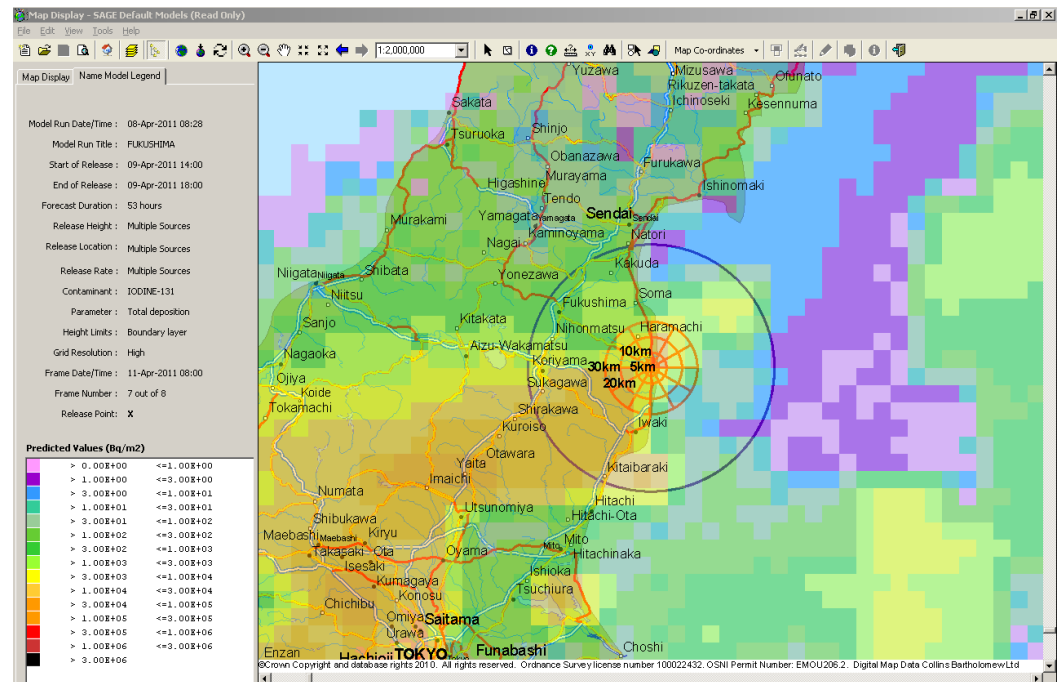
Scientific Advisory Group in Emergencies



Response

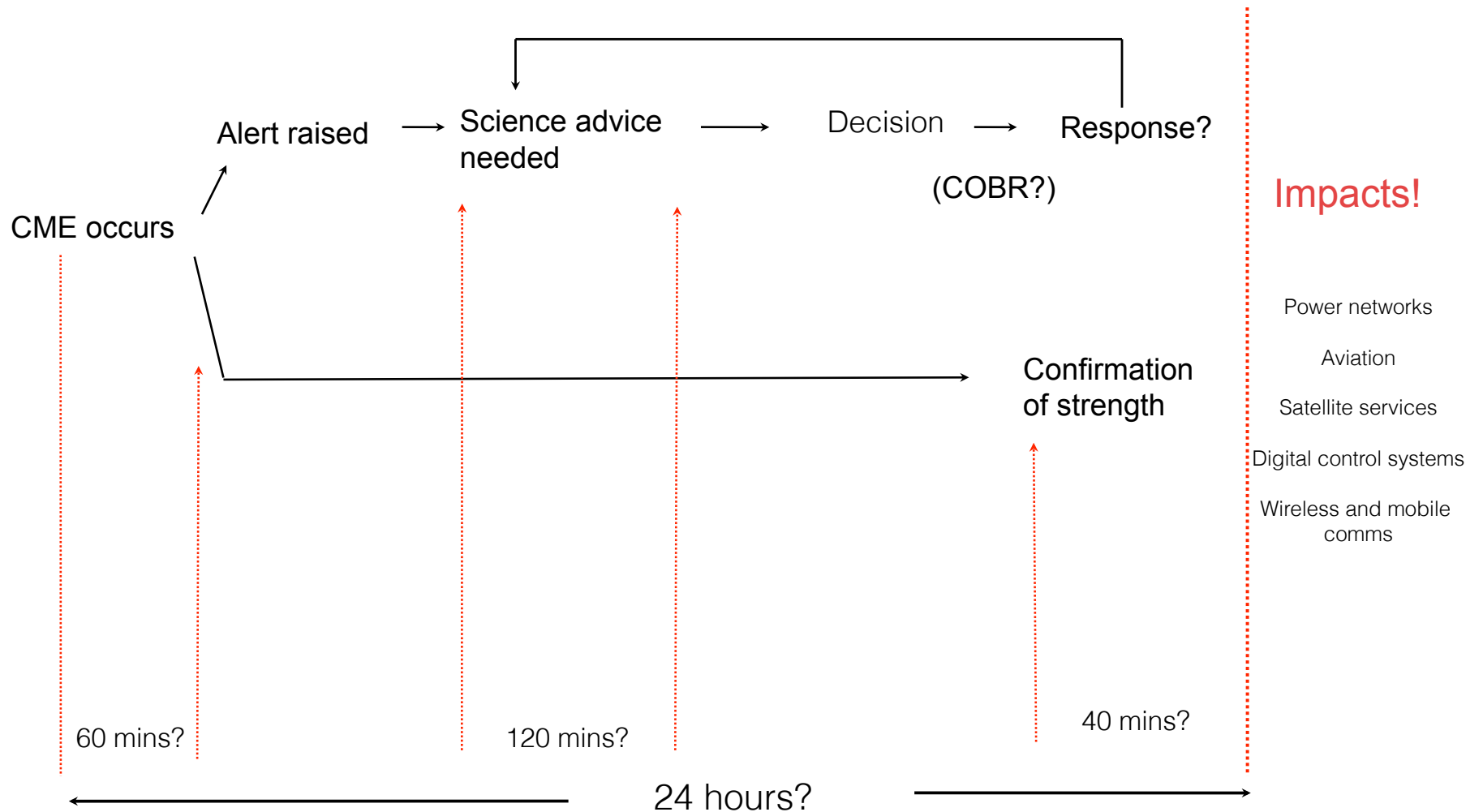
Reasonable worst case (illustration)

- Cooling activities fail
- Failure of the reactor pressure vessel
- Explosive reaction
- Radioactive material up to 500 metres
- Wind blowing toward Tokyo



Space weather: response

Timeline



What we need from SAGE

For a space weather incident, COBR would want to know issues such as:

What is the likely impact on:

- Power networks
- Aviation
- Satellite services
- Digital control systems
- Wireless and mobile comms

How will it develop?

How does this compare with the Reasonable Worst Case?

What solutions/mitigation?

Scientific pros/cons of approaches

Degree of consensus - UNCERTAINTIES

Questions?

Government funding of science



BIS | Department for Business
Innovation & Skills

THE ALLOCATION OF SCIENCE AND
RESEARCH FUNDING

2011/12 TO 2014/15

INVESTING IN WORLD-CLASS SCIENCE
AND RESEARCH

DECEMBER 2010



Research councils &
universities:
£5 billion
Haldane principle



Briefing on the
likelihood of severe
winter weather over
the next 20-30 years

For Sir John Beddington, GCSA

13 December 2010

Prof Julia Slingo,
Met Office Chief Scientist

Prepared by
Julia Slingo, John Prior, James Murphy, Doug
Smith, Adam Scaife, Huw Lewis, Chris Gordon

Government
science:
£3.1 billion